

ECONOMIC IMPACT ANALYSIS OF CRITICAL HABITAT DESIGNATION FOR BRAUN'S ROCKCRESS: SUMMARY

Background

On June 3, 2003, the U.S. Fish and Wildlife Service (the Service) proposed designation of critical habitat for the Braun's rockcress (*Arabis perstellata*) on approximately 811 acres in Franklin and Owen Counties, Kentucky, and 198 acres in Rutherford County, Tennessee.¹ The Service then proposed expanding three previously proposed units and adding two units, increasing the proposed designation to 1,600 acres in Rutherford (684 acres) and Wilson (106 acres) Counties, Tennessee, and Franklin (697 acres) and Owen (114 acres) Counties, Kentucky.² Approximately 1,573 acres (98 percent) are privately owned and 27 acres (two percent) are owned by the State of Kentucky.



Arabis perstellata

Major Effects of the Proposed Rule

Federal agencies are required to consult with the Service under section 7 of the Endangered Species Act (Act) to ensure that any action they authorize, fund, or carry out will not likely jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of a listed species' critical habitat. Activities potentially affected by conservation efforts related to this species include forestry, utilities (primarily transmission lines), development, and road construction and maintenance. Impacts are defined in terms of both the anticipated number and effort level of future consultations as well as any associated project modifications taking place under section 7 of the Act.

***TOTAL SECTION 7 COSTS ASSOCIATED WITH
THE LISTING AND DESIGNATION OF CRITICAL
HABITAT FOR ARABIS PERSTELLATA
2003-2013***

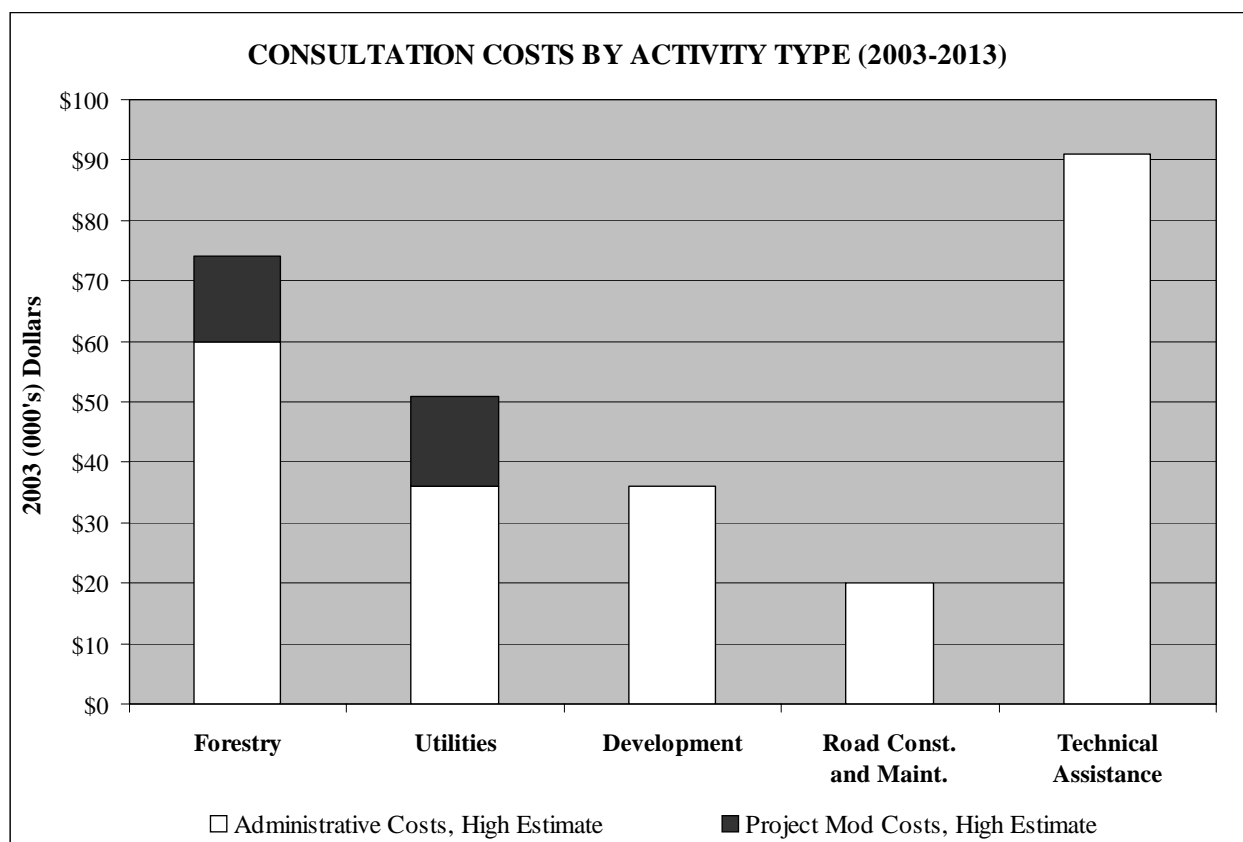
<i>Cost 2003 Dollars:</i>	<i>\$65,000 to \$272,000</i>
<i>Present Value (7%):</i>	<i>\$47,000 to \$209,000</i>
<i>Annualized Cost:</i>	<i>\$7,000 to \$30,000</i>

The total expected cost of this designation, in present value terms is \$47,000 to \$209,000 or about \$7,000 to \$30,000 per year. This range reflects the range in estimates of the number of consultations for forestry and utilities activities, and the range in administrative consultation costs.

Costs can be described by the sector incurring them or by the entity that bears them. Most of the expected costs of this proposed designation of critical habitat are attributable to technical

assistance efforts (approximately 33 percent, or \$91,000). Forestry projects will be most affected by the proposed designation. Consultations associated with forestry activities are expected to comprise about 27 percent (approximately \$74,000) of the total economic impact, and most of these costs (approximately \$60,000) are administrative, associated with consulting with the Service.

In addition to forestry projects, activities potentially affected by the designation of critical habitat for *Arabis perstellata* are: utilities (approximately 19 percent of total expected costs); development (13 percent); and road construction and maintenance (seven percent). Of the total anticipated costs, approximately three percent will be administrative costs borne by the Service (approximately \$7,000), and 46 percent will be administrative and operational costs (including project modifications) borne by the Action agencies (approximately \$126,000). The remainder of the costs, 51 percent, are expected to be borne by third parties, such as private landowners and developers (approximately \$140,000). Project modification costs are expected to be incurred by third parties and Action agencies. These costs are associated with forestry and utilities activities, and include the opportunity cost of forgone assistance for timber stand improvement plans from NRCS and the increased cost of using of manual techniques rather than broadcast spraying for utility line maintenance.



The above table highlights the relative contribution of the effected land use activities to the conservation of *Arabis perstellata* over the next ten years. Because of uncertainty in the future location of activities, the forestry and development consultations and technical assistance efforts are not allocated to units. Between five to 12 consultations regarding the *Arabis perstellata* will potentially occur over the next ten years. Those consultations are allocated as follows:

- **2 to 3 utility consultations** will occur in Unit 20, Indian Mountain (approximately 19 percent of the total economic costs, or \$51,000);
- **1 road construction and maintenance consultation** will occur in Unit 14, Clements Bluff (approximately eight percent of the total economic costs, or \$21,000);
- **1 to 5 forestry consultations** will occur in one of 12 units (3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, or 17);
- **1 to 3 development consultations** will occur in one of four units (1, 2, 8, or 19);
- **60 technical assistance efforts** will occur in any of the 22 critical habitat units.

Benefits Associated with the Proposed Rule

Although the economic analysis does not quantify the benefits arising from designation of critical habitat for *Arabis perstellata*, such benefits may include preservation of an endangered species; the education/information value of the designation; increased support for existing conservation efforts; and reduced uncertainty regarding the extent of *Arabis perstellata* habitat.

Small Business and Energy Industry Effects

Either no project modifications, or minor project modifications and/or opportunity costs are expected from the proposed critical habitat designation for *Arabis perstellata*. Because small entities are unlikely to be significantly affected by consultations that do not involve costly project modifications, a significant economic impact on a substantial number of small entities is not expected to result from the designation of critical habitat for *Arabis perstellata*. The energy industry will also not experience a significant adverse effect because of the designation.

Key Assumptions

The following table presents the key assumptions of this economic analysis, as well as the potential direction of the bias introduced by each assumption.

CAVEATS TO THE ECONOMIC ANALYSIS AND POTENTIAL DIRECTION OF INTRODUCED BIAS ON TOTAL SECTION 7 COSTS	
Key Assumption	Effect on Cost Estimate
Design restrictions on road projects to be planned in the future do not add costs to the project.	-
County comprehensive plans are a good indicator of future land use.	?
NRCS will withdraw assistance for timber stand improvement plans that will adversely affect <i>Arabis perstellata</i> .	+
There will be no consultations for cell tower construction.	-
The rate of technical assistance will not decrease over time.	+
The presence of other threatened and endangered species has no influence on consultation or project modification costs.	+
Action agency Best Management Practices are baseline protections that are practiced consistently, and as such, do not introduce additional costs to section 7 consultations.	+/-
- : This assumption may result in an underestimate of real costs. + : This assumption may result in an overestimate of real costs. +/- : This assumption has an unknown effect on estimates.	

1. The regulatory action was proposed in the Federal Register on June 3, 2003 (68 FR 33058).
2. The regulatory action was proposed in the Federal Register on January 29, 2004 (69 FR 4274).